



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,464	06/29/2001	Michel Ruffin	Q64056	7377

23373 7590 10/28/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

PATEL, HARESH N

ART UNIT PAPER NUMBER

2154

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,464

Applicant(s)

RUFFIN ET AL.

Examiner

Haresh Patel

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 1-3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are subject to examination.

Response to Arguments

2. Applicant's arguments filed 7/11/05, pages 5-9, have been fully considered but they are not persuasive. Therefore, rejection of claims 1-6 is maintained.

Applicant argues (1), "cited reference, i.e., Schaefer et al. 6,157,927 (Hereinafter Schaefer) does not teach or suggest transmitting information by means of independent transactions. The examiner respectfully disagrees in response to applicant's arguments. The cited reference, Schaefer discloses multiple transactions including transmitting information by means of independent transactions (e.g., figures 6A-6D, col., 3, lines 1-53, col., 13, line 34 – col., 14, line 49). Schaefer discloses both non-global and global transactions supported using ACID properties including all-or-nothing basis or non-global independent transactions in which each entity commits or aborts its own work independently (e.g., figures 6A-6D, col., 3, lines 1-53, col., 13, line 34 – col., 14, line 49). Also the specification mentions about series of actions and not series of transactions (see pages 1 and 2), ACID: Atomicity, Coherence, Isolation and Durability. These four properties are closely interrelated. The objective of competition and restart control mechanisms executed by a transactional engine is to ensure compliance with them. Atomicity guarantees that all the updates of a transaction are effected or none of them. Failure to comply with this property can change the set of data from a coherent initial state to an incoherent state (see pages 1 and 2). Page 4, lines 33-35 of the specification also states, "parallel" instead of sequential transactions. Although the claims are interpreted in light of the specification,

Art Unit: 2154

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The First inquiry must be into exactly what the claims define. See *In re Wilder*, 166 USPQ 545, 548 (CCPA 1970). Since, applicant's claims contain broadly claimed subject matter, it clearly reads upon the examiner's interpretation of the claimed subject matter. Therefore, the rejection is maintained.

Applicant argues (2), “cited reference, i.e., Schaefer does not teach or suggest the supplier and the consumer being connected by chain of communication channels”. The examiner respectfully disagrees in response to applicant's arguments. The cited reference, Schaefer discloses the supplier and the consumer connected by a chain of communication channels (e.g., elements to support transactions, figures 6A-6D, col., 3, lines 1-53, col., 13, line 34 – col., 14, line 49). Schaefer discloses elements that support both non-global and global transactions supported using ACID properties including all-or-nothing basis or non-global independent transactions in which each entity commits or aborts its own work independently (e.g., figures 6A-6D, col., 3, lines 1-53, col., 13; line 34 – col., 14, line 49). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The First inquiry must be into exactly what the claims define. See *In re Wilder*, 166 USPQ 545, 548 (CCPA 1970). Since, applicant's claims contain broadly claimed subject matter, it clearly reads upon the examiner's interpretation of the claimed subject matter. Therefore, the rejection is maintained.

Applicant argues (3), “the cited reference, i.e., Schaefer does not disclose, teach, or suggest all of the features of independent claims, i.e., a series of sequential independent

Art Unit: 2154

transactions, wherein the setup if a previous transaction has succeeded". The examiner respectfully disagrees in response to applicant's arguments. The limitations, "a series of sequential independent transactions, wherein the setup if a previous transaction has succeeded", has been newly added, which is addressed by the new ground(s) of rejection (please refer to the below rejections of this office action). Therefore, the rejection is maintained.

Priority

3. Applicant was requested, office action dated 3/10/2005, to submit the translated priority document in English for the foreign priority document for verification, in order to benefit the effective date as the foreign priority document. However, the examiner has not received the translated priority document and the examiner has not applied prior arts that are available for the rejection (dated between the claimed priority date and the effective date of this application). Applicant is requested to respond/submit the English translated foreign priority document, which would help the examiner to know whether to apply the above-mentioned prior arts dated between 8/16/1999 and 8/10/2000. (see 37 CFR 1.55(a)(3)) and MPEP 706.02(b)). The claimed, series of sequential independent transactions is set up if a previous transaction has succeeded, etc., are not disclosed in the available abstract of the foreign priority application; hence, applicant does not benefit the effective date as the foreign priority date

Response to Amendment

4. The amendment filed 7/11/2005 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new

Art Unit: 2154

matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

- a. addition of limitations, "series of sequential transactions", "if a previous transaction has succeeded", in claim 1.

Applicant is required to cancel the new matter, to avoid abandonment of this application, in the reply to this Office Action.

Claim Objections

5. Claims 1-3, 5 are objected to because of the following informalities:

Claim 1 mentions, ACID, which should be, Atomicity, Coherence, Isolation and Durability (ACID).

Claims 2 and 3 mentions, "A method according to", which should be "The method according to".

Claim 5 mentions, "A communication channel according to", which should be "The communication channel according to".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2154

6. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art to use and/or make the invention.

7. The specification does not contain subject matter to implement limitations, “a series of sequential transactions”, “if a previous transaction has succeeded”, as cited in claim 1. Also, it is not apparent how transactions are independent as the claimed each of the transactions, depends on a previous transaction has succeeded (see claim 1). Also the specification mentions about series of actions and not series of transactions (see pages 1 and 2), ACID: Atomicity, Coherence, Isolation and Durability. These four properties are closely interrelated. The objective of competition and restart control mechanisms executed by a transactional engine is to ensure compliance with them. Atomicity guarantees that all the updates of a transaction are effected or none of them. Failure to comply with this property can change the set of data from a coherent initial state to an incoherent state (see pages 1 and 2). Page 4, lines 33-35 of the specification also states “parallel” instead of sequential transactions.

Examiner has reviewed the specification (OCR whole document) and could not find support for the additional limitations as claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 2154

8. Claims 2, 3, 4, 6, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitations, “said independent transaction”. There is insufficient antecedent basis for this limitation in the claim. Since, multiple “independent transactions” (one of said independent transactions, finalizing an independent transaction) exist in the claim, it is not clear which “independent transaction” is referred by the limitations in the claim.

Claim 3 recites the limitations, “said clients”. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitations, “said channel”, “said information”, “said transaction”. There is insufficient antecedent basis for this limitation in the claim. Since, multiple “channels” (communication channel, other communications channels), “information” (transmission of information, information contained in a transaction), “transactions” (contained in a transaction, initiating transactions) exist in the claim, it is not clear which “channel”, “information”, “transaction” is referred by the limitations in the claim.

Claim 6 recites the limitations, “said channel”, “said information”, “said transaction”, “the target”. There is insufficient antecedent basis for this limitation in the claim. Since, multiple “channels” (plurality of communication channels), “information” (transmission of information, information contained in a transaction), “transactions” (contained in a transaction, initiating transactions) exist in the claim, it is not clear which “channel”, “information”, “transaction” is referred by the limitations in the claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaefer et al. 6,157,927 (Hereinafter Schaefer) in view of "ObjectStore Java API User Guide", Chapter 5, Working with Transactions, pages 1-10, (Hereinafter ObjectStore) and Leymann et al., 6,012,094, IBM (Leymann-IBM).

11. As per claim 1, Schaefer teaches the following:

a method of transmitting information asynchronously (e.g., col., 14, lines 6 – 10) between a supplier and a consumer in accordance with ACID properties (e.g., col., 1, lines 51 – 57), said supplier and said consumer being connected by a chain of communication channels (e.g., col., 2, lines 24 – 61), the method comprising transmitting said information by means of independent transactions (e.g. multiple transactions are supported e.g., figures 6A-6D, both non-global and global plurality of transactions are supported using ACID properties, , col., 3, lines 1-53, further asynchronous transactions are supported for distributed transaction processing, col., 13, line 34 – col., 14, line 49) set up

between said supplier and a first communication channel of said chain (e.g., col., 2, lines 24 – 61, figures 1-4G),

Art Unit: 2154

between each of the communication channels of said chain (e.g., col., 2, lines 24 – 61, figures 1-4G), and

between the a last communication channel of said chain and said consumer (e.g., col., 2, lines 24 – 61, figures 1-4G).

However, Schaefer does not specifically mention about series of sequential transactions.

ObjectStore discloses the well-known concept of handling series of sequential transactions (e.g., page 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schaefer with the teachings of ObjectStore in order to facilitate handling series of sequential transactions because the sequential transactions would support processing of information in a sequential manner. The series of sequential transactions would enhance providing information from one entity to another.

However, Schaefer does not specifically mention about series of sequential transactions.

However, ObjectStore and Schaefer do not specifically mention about usage of set up if a previous transaction has succeeded.

Leymann-IBM discloses the well-known concept of usage of set up if a previous transaction has succeeded (e.g., col., 11, line 21 – col., 12, line 56, figures 4-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schaefer and ObjectStore with the teachings of Leymann-IBM in order to facilitate usage of set up if a previous transaction has succeeded because the previous transaction would support providing information for processing of information in a

Art Unit: 2154

current transacton. The series of sequential transactions would enhance providing information from one entity to another.

12. As per claims 2 and 4, Schaefer, ObjectStore and Leymann-IBM disclose the claimed limitations as reject above. Schaefer also teaches the following:

a communication channel enabling asynchronous transmission of information between a supplier and a consumer in accordance with ACID properties (e.g., col., 1, lines 51 – 57),

each communication channel has a set of clients which are other communication channels or consumers (e.g., col., 8, lines 25 – 67) and when one of said communication channels of said chain is a target of one of said independent transactions (e.g., col., 8, lines 25 – 67), the method further comprises:

storing said information in a reliable memory (e.g., col., 9, line 31 – col., 10, line 24),
finalizing said independent transaction (e.g., col., 9, line 31 – col., 10, line 24), and
initiating independent transactions with said clients containing said information (e.g., col., 9, line 31 – col., 10, line 24).

13. As per claims 3, 5, Schaefer, ObjectStore and Leymann-IBM disclose the claimed limitations as reject above. Schaefer also teaches the following:

to initiate said independent transactions said information is stored in a plurality of queues (e.g., col., 13, line 38 – col., 14, line 49) each of which is associated with one of said clients and consumed by a thread (e.g., col., 12, lines 13 – 47),

utilizing a plurality of communication channels (e.g., col., 12, lines 13 – 47).

14. As per claim 6, Schaefer, ObjectStore and Leymann-IBM disclose the claimed limitations as reject above. Schaefer also teaches the following:

a transactional asynchronous communication architecture (e.g., col., 13, line 37 – col., 14, line 49, col., 2, lines 24 – 61, figures 1-4G) comprising a plurality of communication channels (e.g., col., 2, lines 24 – 61, figures 1-4G) enabling asynchronous transmission of information (e.g., col., 13, line 37 – col., 14, line 49, col., 2, lines 24 – 61, figures 1-4G) between a supplier and a consumer in accordance with ACID properties (e.g., col., 1, lines 51 – 57, e.g. multiple transactions are supported e.g., figures 6A-6D, both non-global and global plurality of transactions are supported using ACID properties, in which each entity commits or aborts its own work independently, col., 3, lines 1-53, further asynchronous transactions are supported for distributed transaction processing, col., 13, line 34 – col., 14, line 49), each of said channels having a set of clients which can be other communication channels or consumers (e.g., col., 2, lines 24 – 61, figures 1-4G), wherein each of communication channels (e.g., col., 2, lines 24 – 61, figures 1-4G) comprises:

means for storing information contained in a transaction for which said channel is the targets (e.g., figures 1-4G, col., 9, line 31 – col., 10, line 24),

means for finalizing said transaction (e.g., col., 13, lines 1 – 19, col., 15, line 51 – col., 16, line 42), and

means for initiating transactions containing said information with said clients (e.g., figures 1-4G, col., 9, line 31 – col., 10, line 24).

Conclusion

15. The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and not relied upon is considered pertinent to applicant's disclosure.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

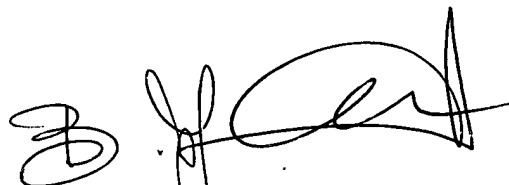
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

October 15, 2005



BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER